

WHAT IS CLAIMED IS:

1. A packet transmission system comprising:
packet identification information addition means for adding packet
identification information to a packet to be transmitted; and
5 transmission means for transmitting said packet allocated said
packet identification information a plurality of times even if the packet
transmission system does not receive a retransmission request from a
reception side.
- 10 2. The packet transmission system according to claim 1, further
comprising:
compression means for deleting a header of a third OSI layer and a
header of a fourth OSI layer of the packet to be transmitted, and making
data of a fifth OSI layer carried on a second OSI layer before adding the
15 packet identification information to the packet to be transmitted.
3. The packet transmission system according to claim 1, wherein
said packet is any one of a multicast packet and a broadcast packet.
- 20 4. The packet transmission system according to claim 1, wherein
said transmission means transmits said packet allocated said packet
identification information and a redundant packet which is a duplicate of
said packet allocated said packet identification information.
- 25 5. The packet transmission system according to claim 1, wherein
said packet identification information addition means adds one said
packet identification information to each of a plurality of packets to be

transmitted.

6. The packet transmission system according to claim 1, further comprising:

5 reception means for receiving information on a simultaneous packet loss frequency at the reception side per certain period, wherein said transmission means changes a transmission parameter based on said information on the simultaneous packet loss frequency.

10 7. The packet transmission system according to claim 1, wherein said transmission means transmits said packet allocated said packet identification information, with a MAC (Media Access Control) address common to a plurality of reception devices set as a destination address.

15 8. The packet transmission system according to claim 7, further comprising:
means for retransmitting said packet if the packet transmission system does not receive an acknowledgement of transmission of said packet.

20 9. The packet transmission system according to claim 1, further comprising:
determination means for determining whether information equal in type to the packet identification information to be added by the packet identification information addition means is already added to said packet to
25 be transmitted, wherein
if a determination result of said determination means is positive, said packet to be transmitted is transmitted while bypassing said packet

identification information addition means and said transmission means.

10. A wireless LAN base station comprising the packet transmission system according to any one of claims 1 to 9.

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11. A conference server comprising the packet transmission system according to any one of claims 1 to 8.

12. A packet reception system comprising:

10 reception means capable of receiving same packets allocated packet identification information once or a plurality of times without a retransmission request;

determination means for determining whether the reception means receives the same packets allocated said packet identification information the plurality of times or not; and

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discard means for leaving only one of the same packets and discarding the other packets if a determination result of said determination means is positive.

20 13. The packet reception system according to claim 12, wherein each of said packets received has a structure in which data of a fifth OSI layer is directly carried on a second OSI layer, and

the packet reception system further comprises restoration means for restoring a header of a third OSI layer and a header of a fourth OSI layer of each of said packets received.

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14. The packet reception system according to claim 12, wherein

each of said packets is any one of a multicast packet and a broadcast packet.

15. The packet reception system according to claim 12, wherein
5 each of said packets includes a plurality of higher level packets.

16. The packet reception system according to claim 12, further comprising:

counting means for counting a simultaneous packet loss frequency
10 per certain period; and

transmission means for transmitting information on said simultaneous packet loss frequency.

17. The packet reception system according to claim 12, further
15 comprising:

holding means for holding a MAC address which is common to a plurality of reception devices, wherein

said reception means receives said packets having said MAC address as a destination MAC address.

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18. The packet reception system according to claim 17, further comprising:

response means for transmitting an acknowledgment to a sender when said packets are received.

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19. A packet transmission and reception system comprising:
the packet reception system according to claim 12;

detection means for detecting whether said reception means have received the same packets at least once or have not receive the same packets at all; and

5 means for causing a plurality of higher level packets to be included in a packet to be transmitted based on a frequency with which said reception means have not receive the same packets at all.

10 20. A wireless LAN terminal comprising the packet reception system according to any one of claims 12 to 18.

21. A wired LAN terminal comprising the packet reception system according to any one of claims 12 to 18.

15 22. A wireless LAN terminal comprising the packet transmission and reception system according to claim 19.

23. A wired LAN terminal comprising the packet transmission reception system according to claim 19.